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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,428	08/05/2003	Taku Ishizawa	405507/0012	8311
7590	09/30/2004		EXAMINER	
Lawrence Rosenthal Stroock & Stroock & Lavan LLP 180 Maiden Lane New York, NY 10038			STEWART JR, CHARLES W	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/634,428

Applicant(s)

ISHIZAWA ET AL.

Examiner

Charles W. Stewart, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/4/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine ground in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 428, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-10 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-9 of U.S. Patent No. 6,648,445 B2.

With regards to claim 1, Ishizawa et al. discloses a circuit board having a storage device for storing data relating to a marking material for print, said circuit board comprising: at least two ground terminals arranged on said circuit board at two edges thereof that are located on one

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axis thereof; and a plurality of terminals arranged on said circuit board, for read/write operations on said data relating to a marking material for print.

With regards to claim 2, wherein said plurality of terminals and said ground terminals are arranged in a single row, with two of said at least two ground terminals being located at the outermost ends of said row.

With regards to claim 3, wherein said plurality of terminals are arranged to form a plurality of rows, with two of said at least two ground terminals being located at the outermost ends of one of said plurality of rows.

With regards to claim 4, wherein said plurality of terminals include a clock signal terminal, said clock signal terminal being located between two of said at least two ground terminals.

With regards to claim 5, wherein said plurality of terminals include a power supply terminal, two of said at least two ground terminals being located at the outermost ends of a row different than the row that contains said power supply terminal.

With regards to claim 6, wherein said plurality of terminals include a power supply terminal and a control signal terminal, and said at least two ground terminals are not the terminals in closest proximity to said power supply terminal.

With regards to claim 7, wherein said pluralities of terminals are arranged at intervals of approximately 1 mm in the direction of formation of said rows.

With regards to claim 4, wherein said plurality of terminals form a plurality of rows parallel to one side of said circuit board, and said two ground terminals are arranged at the outermost ends of one of said plurality of rows.

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With regards to claim 6, wherein said plurality of terminals include a clock signal terminal, a control signal terminal, and a power supply terminal, said two ground terminals being located at the outermost ends of a row that is different from the row that includes said power supply terminal, and that includes said clock signal terminal.



It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a plurality of terminal arranged on said circuit board, for read/write operations on said data relating to a marking material for print.

Contact Information

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles W. Stewart, Jr. whose telephone number is (571) 272-2154.

Charles Stewart, Jr.

August 20, 2004



Stephen D. Maier
Primary Examiner

Stephen D. Maier
Primary Examiner